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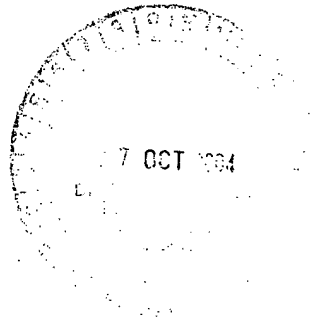
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RF 221

In Reply Please Quote Our Reference

Your Ref : MJ/JOL/AA/PAT/8114633/SG
Our Ref : 2003055969/041025/TMABS/7289
Date : 25/10/2004
Writer's Direct Line : 6330 2748

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Dear Sir

Singapore Patent Application No.: 200305596-9

**Title of invention: INK CONTAINER, RECORDING HEAD AND RECORDING DEVICE USING
SAME**

Applicant(s): CANON KABUSHIKI KAISHA (JP)

SEARCH AND EXAMINATION REPORT

The search and examination report for this application has been established and a copy of it is attached. The application will proceed to publication in accordance with section 27 of the Patents Act (Cap. 221).

Your attention is drawn to the provisions of the Patents Act and Patents Rules (Cap. 221, R1) for further proceedings in relation to this application. In particular, you can now proceed to file your request for the grant of the patent. Please refer to sections 30 to 32 of the Patents Act and rules 47 to 50 of the Patents Rules, in this respect, especially the prescribed time limits for the necessary actions.

If you have any further queries, please do not hesitate to contact the undersigned.

Thank you.

Yours faithfully

Annie Besant d/o Surendran
for REGISTRAR OF PATENTS
SINGAPORE

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Austrian Patent Office
Service and Information Sector
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To

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Date of mailing: **08. Juli 2004**

Applicant
CANON KABUSHIKI KAISHA

Application No.
200305596-9

Filing Date
25 September 2003 (25.09.2003)

(Earliest) Priority Date
30 September 2002 (30.09.2002)

International Patent Classification (IPC⁷)

B41J 2/175

Please find enclosed the

- ☒ **SEARCH REPORT**
- ☒ **EXAMINATION REPORT**
- ☐ **WRITTEN OPINION**

12 JUL 04 AM 9:47

provided by the Austrian Patent Office as Search and Examination Authority according to the Memorandum of Understanding between the Government of Singapore and the Austrian Patent Office (MOU)

Best regards

AUSTRIAN PATENT OFFICE
Service and Information
Sector TRF

Dr. Flammer

Enclosures:

- ☒ the search report
(it is also accompanied by a copy of each prior art document cited in the report)
- ☒ the examination report
- ☐ the written opinion
- ☐ the Registry's copy of the priority application



Austrian Patent Office

Application No. 200305596-9	Applicant: CANON KABUSHIKI KAISHA
Filing date 25 September 2003 (25.09.2003)	(Earliest) Priority Date 30 September 2002 (30.09.2002)

GENERAL OBSERVATIONS

☒ With regard to the abstract the text has been established by this Authority as it appears on the following section FSG005.

☒ The application contains neither statements disparaging any person nor expressions etc. contrary to morality or the public order.

☒ Unity of invention is given.

Consequently, all parts of the application were the subject of examination in establishing this report.

☒ Basis of the report:

The search report and the examination report have been drawn on the basis of the application as transmitted with the request.

AUSTRIAN PATENT OFFICE
Dresdner Straße 87, A-1200 VIENNA
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Authorized Officer

WITTMANN K.

Telephone No. ++431/53424/ 380

**TEXT OF THE ABSTRACT**INK CONTAINER, RECORDING HEAD AND RECORDING DEVICE USING SAME

An ink container (10A, 10B) includes a casing (11) having a substantially rectangular shape; a plurality of ink accommodating portions defined by partition (52) in the casing; ink supply ports (14) provided, in a bottom side of the casing, for the ink accommodating portions, respectively; wherein the ink container is detachably mountable to a holder (31) provided with a recording head portion (32) for ejecting ink accommodated in the ink accommodating portion, wherein the plurality of ink supply ports (14) are disposed deviated toward one of long edge (Q) of the bottom side; and a plurality of dimple portions (40) in which the supply ports are formed, respectively, and the dimples is cut away (40a) and opens adjacent to the one of edges.

Figure 1.



SEARCH REPORT

Application No.
200305596-9

A. CLASSIFICATION OF SUBJECT MATTER

According to the International Patent Classification (IPC⁷):

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B. FIELDS SEARCHED IPC⁷:

B41J

Electronic data base consulted during the search (name of data base and, where practicable, search terms used)
WPI, EPODOC, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5619237 A (INOUE et al.) 8 April 1997 (08.04.1997) <i>figs. 30b, 30c.</i> --	1-9
A	US 6137512 A (HIGUMA et al.) 24 October 2000 (24.10.2000) <i>figs. 8, 9.</i> ----	4-7

☐ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the filing date but later than the priority date claimed

"T" later document published after the filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of actual completion of the search: 4 May 2004 (04.05.2004)

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Austrian Patent Office

Application No. 200305596-9	Applicant CANON KABUSHIKI KAISHA
Filing date 25 September 2003 (25.09.2003)	(Earliest) Priority Date 30 September 2002 (30.09.2002)

SEARCH REPORT

EXPLANATIONS

The documents cited in the search report disclose:

US 5619237: The ink jet printer has a carriage mounted on guide rails and moving across the printing material. The carriage supports a print head unit. The print head is removable and can be changed between a black print head and a colour print head. Each print head has space to hold an ink container which houses either black or coloured ink.

The container is rotated into the head using a front stepped area for guidance and a rear claw to retain it. The claw is pressed forward during loading or unloading. The print head has projections that allow it to be pulled upward to release the print head.

US 6137512: The ink container includes a fibrous material. An ink discharge port discharges ink to an ink jet head. A portion contains the fibrous material at least adjacent the ink discharge port. The fibrous material is deformed within a degree of elasticity, forming several intersections in different directions, and contained in the containing portion. The fibre material has a diameter larger than a diameter of a filter adjacent the discharging port in the ink container or in the ink jet head. Most portions of the fibrous material in contact with an inner wall of the ink container are curved portions. The wall and the fibrous material are made of olefin resin.



SEARCH REPORT

Information on patent family members

Application No.

200305596-9

This annex lists the patent family members relating to the patent documents cited in the search report.
The members are as contained in the EPIDOS INPADO file.
The Office is in no way liable for these particulars which are merely given for the purpose of information

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US A 5619237		DE D 69532150D	2003-12-24
		DE T 69528778T	2003-11-20
		EP A 1354711	2003-10-22
		CA A 2434525	1996-02-25
		US A 2003117468	2003-06-26
		ES T 2186956T	2003-05-16
		DE T 69529236T	2003-06-05
		CA A 2402573	1996-02-25
		CA A 2402558	1996-02-25
		DE D 69529236D	2003-01-30
		CN A 1388003	2003-01-01
		DE U 29522398U	2002-11-21
		ES T 2175577T	2002-11-16
		DE D 69528778D	2002-12-12
		CN A 1376584	2002-10-30
		US A 2002118248	2002-08-29
		DE T 69526459T	2002-08-29
		DE D 69526459D	2002-05-23
		EP A 1203668	2002-05-08
		US B 6361158	2002-03-26
		US B 6336709	2002-01-08
		CN A 1310093	2001-08-29
		SG A 74051	2000-07-18
		SG A 73486	2000-06-20
		DE U 29522166U	2000-05-04
		KR B 156794	1999-03-30
		CN A 1210788	1999-03-17
		CN A 1212207	1999-03-31
		EP A 0885729	1998-12-23
		EP A 0884186	1998-12-16
		EP A 0879703	1998-11-25
		AU A 7182898	1998-08-20
		AU A 5036098	1998-04-09
		AU B 688545	1998-03-12
		US A 5619237	1997-04-08
		EP A 0698497	1996-02-28
		CA A 2156809	1996-02-25
		AU A 3020695	1996-03-14
		CN A 1132145	1996-10-02
		JP A 8058107	1996-03-05
		JP A 8230206	1996-09-10
		JP A 8276601	1996-10-22
		JP A 8224883	1996-09-03
US A 6137512		CN A 1280062	2001-01-17
		CA A 2253015	1996-01-07
		ES T 2187407T	2003-06-16
		DE T 69529630T	2003-07-03
		US B 6578957	2003-06-17
		DE D 69529630D	2003-03-20
		HK A 1011661	2002-07-05
		US A 2002154201	2002-10-24
		CA A 2339555	1996-01-07
		DE T 69523672T	2002-08-01
		US B 6412932	2002-07-02
		US B 6394591	2002-05-28
		US A 2002021339	2002-02-21
		ES T 2162881T	2002-01-16
		DE D 69523672D	2001-12-13
		EP A 1110737	2001-06-27
		US A 6137512	2000-10-24
		EP A 1027994	2000-08-16
		EP A 1025998	2000-08-09
		KR B 156614	1998-12-01
		SG A 67459	1999-09-21
		AU A 1008399	1999-03-04



SEARCH REPORT

Information on patent family members

Application No.

200305596-9

This annex lists the patent family members relating to the patent documents cited in the search report.
The members are as contained in the EPIDOS INPADOC file.
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
		AU A 1008299	1999-03-04
		AU B 697516	1998-10-08
		SG A 34993	1997-02-01
		EP A 0691207	1996-01-10
		CA A 2153301	1996-01-07
		AU A 2485295	1996-01-25
		CN A 1125177	1996-06-26
		JP A 8020115	1996-01-23
		JP A 8020116	1996-01-23



EXAMINATION REPORT



WRITTEN OPINION

Application No.
200305596-9Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

Date of actual completion of the report / opinion: 4 May 2004 (04.05.2004)

1. STATEMENT

Novelty (N) YES Claims 1-9

NO Claims ----

Inventive step (IS) YES Claims 1-9

NO Claims ----

Industrial applicability (IA) YES Claims 1-9

NO Claims ----

2. CITATIONS AND EXPLANATIONS

The following documents have been cited in the Search Report:

D1: US 5619237 A

D2: US 6137512 A

With regard to claims 1-9 the patent documents cited in the search report merely represent a state of the art not disclosing all the essential features of these claims.

Therefore said documents do not anticipate novelty and inventiveness of the subject matter of these claims.

Industrial applicability is given.